G. R. S. IX-5]

Previous references.

S+A File No. 6/94

191 .

Serial Nos. 1-4

(Salary and Allowance)

Later references.

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 1-4

Part B for

SUBJECT.

Bill of Mr. R. Bruce Hooli State Geologist.

W D 88—GPB—50,000—24-7-16

Entered

Countermarked

1894

GOVERNMENT OF MYSORE

GENERAL

PROCEEDINGS

S+A b/94

Dated Camp Mysore, 26th November 1894

No. 36—D. H. O.
M. 1-90

Organization of Geological Department in Mysore.

M. G. O. P. B.—19-1-95—120

4. The travelling allowances of the other employés should follow the rules of the Mysore Service Regulation and are fixed as follows :—

1. Dr. J. W. Evans, as for Deputy Commissioners and Executive Engineers.
2. Prospector, Assistant Prospector and Assistant Geologists, as for Assistant Commissioners and Assistant Engineers.
3. Apprentice Geologists, as for Apprentice or Sub-Assistant Engineers.
4. Subordinate Establishment, under the ordinary General Rules.

5. A lump sum grant of Rs. 1,400 for the Library, Laboratory and Furniture for the Museum is sanctioned for the current year.

6. In other Departments considerable reduction of expenditure is contemplated with effect from 30th June 1896, and the need for similar reduction in the cost of the Geological Department is anticipated, if not by June 1896, at least by June 1897. It is therefore important that the Department should be so constituted and worked as to make such reduction readily feasible hereafter. This consideration has been kept in view in framing the scale of establishment sanctioned above, and it is only necessary to add that the most important duty of the establishment now sanctioned is to train a local staff of Geologists for the entire work of the Department in all its branches under the direction of a single European Head of the Department to be styled the State Geologist. Under such circumstances it is hereby expressly laid down that all Officers who may now be entertained for the present work of the Department should be regarded as on Temporary Establishment liable to be discharged at any time after 30th June 1896 without the three months' previous notice of discharge contemplated by Section 287 of the Mysore Service Regulations (Section 478 of the British Civil Service Regulations).

7. Officers of this Department are entitled to be supplied with Government tents for their use on tour of inspection or other public duty according to the scale given below, and to the benefit of the exception provided for in Article 539 of the Mysore Service Regulations :—

For the State Geologist.

2 Large single pole tents with double kanats.
1 10' Bechoba.
1 Necessary tent.
2 Pal tents for orderlies and servants.

For Senior Geologist and Analyst.

1 Large single pole tent.
1 12' Hill tent.
1 Necessary tent.
2 Pals.

For the Prospector.

2 12' Hill tents.
1 Necessary tent.
1 Pal.

For the Assistant Prospector.

1 12' Hill tent.
1 10' Bechoba.
1 Necessary tent.
1 Pal.

For the Apprentices.

5 10' Bechobas or pals.

For the Hospital Assistant.

1 10' Bechoba or pal.

8. The State Geologist is authorized to countersign bills of the Officers of this Department and their Establishments in cases of continuous halts of more than ten days at one place.

9. This Department will be entitled to the benefit of the provisions of Article 562 of the Mysore Service Regulations.

C. SRIKANTESVARA AIYAR,
for *Chief Secretary.*

To—The State Geologist in Mysore.
The Comptroller in Mysore.

Exd.—A.N S.

(*General*),—*dated 26th November* 1894.

No. 36 D.H.O.—M. 1-90, DATED, CAMP MYSORE, 26TH NOVEMBER 1894.

ORDER THEREON.—The Government resolve that the work of the Geological Department now in course of formation should be as laid down in the Dewan's Minute of 18th July 1894 and elaborated in the subsequent memoranda drawn up by Mr. Bruce Foote and Dr. Evans.

2. The following scale of establishment for this Department is sanctioned :—

	Sanctioned permanent scale of monthly salaries.	Sanctioned present *ad-interim* scale of monthly salaries for 1894-95.	
A. Officers—	Rs.	Rs.	
1 State Geologist ...	1,500	1,800	Mr. Bruce Foote, the present incumbent, has been engaged for a term of 3 years expiring on 30th September 1897.
1 Senior Geologist and Analyst.	...	900	Dr. Evans will rise in this appointment to Rs. 1,200 by annual increments of Rs. 100 in 3 years.
1 Prospector	...	300	Rising to Rs. 500 by annual increments of Rs. 40.
1 Assistant Prospector ...	...	250	Rising to Rs. 300, after one year's approved service.
7 Assistant Geologists (one of whom will be the Librarian and Curator of the Museum) with a maximum salary of Rs. 300 each	2,100	...	
7 Apprentice Geologists at Rs. 100 each	...	700	
	3,600	3,950	
B. Subordinate Establishment—			
1 Head Clerk, Rs. 70 to 100 ...	100	100	
1 Writer	20	20	
1 Laboratory servant ...	12	12	
1 Hospital Assistant ...	25	25	
1 Dafadar	10	10	
11 Peons	73	73	
8 Laskars	56	56	
1 Sweeper	5	5	
	301	301	
Total A and B ...	3,901	4,251	

The scale of salaries sanctioned for the current year thus amounts to Rs. 4,251 per month.

3. The travelling allowance of Mr. Bruce Foote has been fixed by the terms of his engagement as follows :—

1. Rs. 10 per diem for himself, and
2. For Railway Journeys, one first class fare for himself, third class fare for four servants and the fare of two horses.

All Government tents supplied to Mr. Bruce Foote will be carried at Government cost.

Establishment of the Geological Department, Mysore.

Names of appointments.	Salaries. Minimum.	Salaries. Maximum.	Per annum for 1894-95.	Travelling allowances.	Estimate of annual amount of Travelling allowances.	Total cost per annum.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	
Director	1,500	1,800	21,600	Rs. 10 per diem	2,100	23,700	Present incumbent draws Rs. 1,800 per mensem.
Senior Geologist and Analyst	900	1,200	10,800	Rs. 150 permensem	1,800	12,600	
Mining Assistant and Prospector ...	300	500	3,600	Rs. 5 per diem	1,050	4,650	
Assistant Prospector	300	...	3,600	Rs. 5 per diem	1,050	4,650	
Librarian and Curator of Museum ..	150	300	...	..	...	...	Not needed till the Museum is built.
Seven Apprentices at Rs. 100 per mensem ...	700	1,050	8,400	..	...	8,400	Travelling allowance not yet fixed. Mileage only would appear quite sufficient.
			48,000				
Railway Expenses and Contingent Allowance	...	...	...	...	...	...	Have not been included as it is impossible to forecast what they will come to.
Head Clerk	60	100	720	...	...	720	
1 Writer at Rs. 20	20	20	240	...	...	240	
1 Laboratory Servant	12	12	144	...	..	144	Travelling allowance not known.
2 Hospital Assistants at Rs. 25 ..	50	50	600	...	350	950	
1 Dafadar	10	10	120	...			
11 Peons—2 at Rs. 8, 3 at Rs. 7, 6 at Rs. 6 ...	73	73	876	...	7=584 3=137	1,717	Two Peons remain always at the Head Office, 7 Peons in Camp for 7 months draw mileage at 10 miles for 4 days every week and halting allowance for 3 days. 3 Peons in Camp for 4 months draw mileage at 10 miles fer 4 days every week and halting allowance for 3 days.
8 Khalasis at Rs. 7	56	56	672	...	6=239 2= 50	961	Six Khalasis draw mileage at 10 miles for 2 days every week and halting allowance for 5 days for 7 months. 2 Khalasis draw mileage for 2 days and halting allowance for 5 days every week for 4 months.
1 Sweeper, Office	5	5	60	...	...	60	
Annual grant for Library	...	...	..	...	...	600	
Annual grant for Laboratory	...	...	..	...	...	800	
						60,192	

(General),—dated 26th November 1894.

Nor is it possible to reduce the subordinate staff, indeed it must be increased.

The cost of the six apprentices is an entirely new element in expenditure of the Department and must in fairness be regarded as such.

The staff of the Department which now appears to be absolutely necessary is the following together with its cost for the first year—several of the minor appointments which will ultimately have to be made not being required till the new offices and the Museum have been built which can not be for some time to come.

		Per mensem. Rs.	Rs.
1.	Director	1,800	21,600
2.	Senior Geologist and Analyst	900	10,800
3.	Mining Assistant and Prospector (Permanent appointment)	300	3,600
4.	Assistant Prospector (Permanent or for three years) ..	300	3,600
5—10.	Six Apprentices at 100 each	600	7,200
		3,900	46,800
11.	Librarian	100	1,200
		4,000	48,000

Subordinate Staff—

1	Head Clerk	60
1	Writer.	
2	Writers for field parties.	
2	Hospital Assistants.	
1	Section cutter.	
1	Laboratory servant.	
1	Sweeper.	
12	Peons, 2 for Office.	
8	Khalasis.	

The Curator and Librarian will be appointed when the Museum is at work.

* * * * * *

P. S.—Of the several grants proposed in the original scheme of 1890, the only two which appear needful at present are that of Rs 600 per annum for the Library and that of Rs. 800 per annum for the Laboratory.

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iv. Letter from Mr. Bruce Foote, dated 14th November 1894 and Statement of the cost of the proposed Geological Department.

With refernce to our conversation on Monday the 12th instant, I have the honor to enclose a tabular statement of the annual cost of the Geological Department for the first year as now proposed. I regret that the cost cannot with any regard to efficiency be reduced below the Rs. 60,000 which you mentioned on Monday as a sufficient sum to allow for the whole Department. I must observe that the cost of the apprentices should really not be debited against the Department till they are really Gazetted as Officers in the same. At present and for the next two years certainly, they can only be regarded as students attached for educational purposes. If this item of expenditure is cut out, the cost of the Department will be greatly below the minimum you fixed upon.

* * * * * *

I will prepare a programme of next season's work and send it you in a few days.

Subordinate Officers.

The rule that no mileage can be drawn if the work lie within a radius of five miles from Head-quarters is not fairly applicable to Geological work for the examination of the country within the radius will often require very many miles of walking and the Surveyors as well as the Peons and Khalasis accompanying the Surveyors over such a piece of ground shall be allowed to claim mileages for the number of miles actually gone by the Surveyors who will certify the same for their subordinates. The power of giving a sanction for a halt of more than ten days at any given place required by para 552 might safely be entrusted to the Director, as it is in the Geological Survey of India, for in specially difficult or promising tracts of country a period of much more than ten days may be requisite to unravel the structure of the country.

Field-work.

Field-work is to be carried out in the month of November, December, January and February, March, April and May by two parties under the guidance of the Director and Senior Geologist respectively who will divide the Apprentices between them and each be attended by a Hospital Assistant.

The presence of a Hospital Assistant is of great importance as it will relieve the head of the party of much responsibility and anxiety in case of grave sickness in camp. It would prevent except in very rare cases the necessity of sick men having to be moved into station for treatment which is itself often matter of great difficulty and of danger to the patient.

The presence of a Hospital Assistant is also a very great check on the frequently attempted trick of malingering.

The presence of a Hospital Assistant is in every respect a measure of real economy by the great saving of time it leads to.

The teaching in Geology and Mining work of the Apprentices can in very great measure be done in the field while their Laboratory teaching can be done in the rains, but the teaching of a College class in accordance with the requirements of the Madras University would involve either Dr. Evans or the Director giving up more than three months of the very best part of the field season, *viz.*, from the latter part of January to the end of April, a sacrifice of time the Survey Branch can not possibly afford seeing how heavily it is already handicapped by the time which the teaching of the Apprentices in the field will require; which can not be set down at less than half the time the Surveyors will spend in the field. While the inspection of existing mines will at the lowest estimate, occupy a full month of the time at the disposal of the Officer who may undertake that duty.

Salaries.

The salaries of the staff of the Department are now necessarily set down at higher rates than those named in original scheme drawn up in 1890 owing to the great depreciation of the rupee in the interval.

In the original scheme the Officers recommended were:—

		Per mensem. Rs.
1.	The Director	1,500
2.	First Assistant Geologist	500—800
3.	Second ditto	400—600
4.	Prospector	300—500
5.	Analyst and Curator...	400—700
6.	Laboratory and Museum Assistant	75—150
7.	Registrar Librarian, &c.	200—300

In the scheme for the staff of the Department submitted in May of this year, the number of Officers recommended had to be reduced because of the higher salaries assigned to the gentlemen selected for the posts of Director and Senior Geologist.

The question of the training of Apprentices could not be entered into in that scheme as nothing had been definitely fixed as to the number of young men to be trained nor as to what rate of assistance they were to receive while in the position of mere students.

One Assistant Geologist was proposed to be dispensed with, but the salary of Librarian was enhanced as it was thought advisable to entertain a man of higher qualification who would be also available as Laboratory Assistant. This draft scheme not having met with approval, the present one is now submitted; but the necessity of providing a realy efficient staff for the Department absolutely prevents the recommendation of any reduction either in the number or cost of the staff as proposed in July. As it is the staff is numerically a very weak one for the duties it is expected to perform.

(General),—dated 26th November 1894.

List of tents required.

For the Director—
- 2 Large Single Pole Tents with double kannaths.
- 1 10′ Bechoba.
- 1 Necessary Tent.
- 2 Pal Tents for orderlies and servants.

For the Senior Geologist—
- 1 Large Single Pole Tent.
- 1 12′ Hill Tent.
- 1 Necessary Tent.
- 2 Pal Tents.

For the Mining Assistants—
- 2 12′ Hill Tents.
- 1 Necessary Tent.
- 1 Pal Tent.

For the Assistant Prospector—
- 1 12′ Hill Tent.
- 1 10′ Bechoba.
- 1 Necessary Tent.
- 1 Pal Tent.

For the Apprentices—
- 1 10′ Bechoba each.

For the Hospital Assistants—
- 1 Dispensary Tent each.

Article 359 of the Mysore Service Regulation should be made permanently applicable to the Geological Department as the Officers will more frequently be in jungly places where there is no accommodation of any kind than near Travellers' Bungalows, which moreover they are always liable to find preoccupied.

The nature of the work constantly requires the Geologists to avoid lines of roads and go in among the hills or wild tracts and it would be a mistake to tempt them to follow the lines of road merely because of the convenience of the Bungalows along them.

The Offices required for the Geological Department—

Arranged in the order of emergency with which they are required, they are the following :—

1. Laboratory.
   Balance Room.
   Colorimetric Room.
   Reference Room.
   Furnace Room.
   Store Room.
   Crushing Room.
   Lavatory Room.
2. Library.
   Map Room.
   Microscope Room.
   Geological Work Room.
   Lavatory.
3. Director's Rooms 2.
   Senior Geologist's Room.
   Head Clerk's Room.
   General Office.
   Mining Record Room.
4. Museum, &c.

The plans of the Laboratory, Library and Office have been drawn up and only require to be drawn out fair.

Travelling Allowances.

The Director Rs. 10 per diem when in the field.
The Senior Geologist Rs 10 per diem when in the field.
The Mining Assistant.
The Assistant Prospector.
The Apprentices.

Proceedings of the Government of His Highness the Maharaja of Mysore, (General),—dated 26th November 1894.

READ :—

i. Dewan's Minute, dated 18th July 1894 :—

(1). (*a*) The principal object with which this Department is formed is to make a complete Geological Survey of the Province on the most approved scientific principles and the due publication of the results of such a survey.

(*b*). The next object of the Department is to train a number of young men as Geologists and Mining Engineers. They should receive instruction in Survey and Laboratory work of all kinds and should learn Metallurgy, Chemistry, Assaying, &c. It is desirable to make Geology one of the subjects for the B. A. to be taught in the Central College, and how this is to be effected and to what extent the Geological Department can help the College teaching are matters the details of which have to be settled in consultation with Mr. Cook.

(*c*). Another work which must be entrusted to the Geological Department is the supervision of existing Gold Mines. The rules for such supervision have to be drawn up with special care so as to prevent friction between the Officers of the various Mining Companies and of the Government and to advance the best interests of both ; and

(*d*). The preparation of Geological Maps of the Province on a suitable scale, the collection of all Geological exhibits in a small special Museum, the maintenance of drawings of all existing mines and the working of a properly equipped Laboratory with complete arrangements for mineral analysis, assay, &c., must also devolve upon the new Department.

(2). The above items of work must all be undertaken at once and I shall feel obliged if Dr. Evans will draw up a detailed programme showing how all this work should be carried out. If a draft of such programme is now drawn up, we would have sufficient time to consider it in all its details before Mr. Bruce Foote's return from England in November next, when, in consultation with him, we will be able finally to lay down in clear terms the various duties of the Department.

(3). I would strictly exclude from the sphere of the Department's operations, for the present at least, actual mining or even deep prospecting. Any examinations required for the purpose of the Survey must of course be done, but any prospecting properly so called, or actual mining I will not attempt for many years to come. Mr. Bruce Foote in his Note of 13th July (received this day) mentions certain old mines which he would recommend for re-opening and careful examination. Most of these have already been leased to others. Moreover prospecting of this kind is likely to prove most expensive and must not on any account precede the Geological Survey.

* * * * * *

ii. Dr. J. W. Evans' Memorandum (without date.)

The work of the Department may be classified under the following heads :—

1. The Geological Survey of the Province with so much prospecting as can be carried out in conjunction with such Survey, including the publication of memoirs and maps.

2. Instruction in Geology—

(1) of persons employed or intended to be employed in the Department, and

(2) of students of the Central College who are candidates for the B. A. Degree of the Madras University.

3. Inspection and Supervision of Gold Mines.

4. The collection in a special Museum of objects of Geological, Mineralogical, Metallurgical and Mining interest.

5. The maintenance of a Laboratory for the purpose of making Assays and Analysis of minerals.

I. The Geological Survey should be carried on by at least two parties one under the charge of the Director, and the other of the Senior Geologist. Each party should contain the following staff :—

(*a*) 1 Geologist.

(*b*) 1 Prospector.

(*c*) 1 Assistant to accompany the Geologist to aid in his work and obtain experience in Geological Surveying.

(*d*) 1 Assistant to carry out Topographical Survey where necessary and to map Geological boundaries under the direction of the Geologist.

(*c*) & (*d*) will be Apprentices with knowledge of surveying and shall change places from time to time.

(*e*) when available an Assistant should be attached to the Prospector.

(*f*) 1 Clerk.

(*g*) 1 Hammer-man mounted with saddle bags to accompany Geologist.

(*h*) 2 Coolies to carry specimens.

(*i*) 3 Peons.

(*j*) where circumstances require shallow sinkings for prospecting purposes, there should also be added—

1 Native Miner and one Carpenter.

In surveying the country the party will have their head-quarters for several days at the same locality and the surroundings will be thoroughly examined, mapped and prospected under the supervision of the Geologist, after which the party will move on to a new centre.

The Survey will take place in the months from October to April inclusive except so far as other work may detain the Geologist in Bangalore, in which case such work as can be carried on in his absence may be pursued by the Prospector and such other members of the staff as are available.

II. Instruction in Geology—

(*a*). Of persons employed or intended to be employed in the Department.

(*b*). Of students of the Central College who are candidates for the B. A. Degree of the Madras University.

The two courses of instruction will so far as possible be carried on together. Both will include practical work in the Laboratory and in the field.

The course of instruction of those included in class (*a*) will however be more extensive, especially in Petrology and Mineralogy, than that of the B. A. Candidates. They will also spend more time in practical work. They will subsequently be instructed in mining.

A course of 8 months' instruction is required by the Regulations of the Madras University. The Director will give instruction in Geology for a period of four months (February, March, April and June) on Dynamical Geology, Stratigraphical Geology and Palæontology. The Senior Geologist will give instruction for a period of four months (July, August, September and October) in Mineralogy and Petrology. Arrangements should be made for instruction in German and French.

The entire absence (so far as known) in Mysore of fossiliferous formations and the prevalence of crystalline schists and igneous rocks requires greater attention to be given to Dynamical Geology, Mineralogy and Petrology and less to Stratigraphical Geology and Palæontology than in England. It is suggested that the University of Madras might authorize an alternative Geology Syllabus, giving greater scope for work in the former subjects, or the same object might be effected by increasing the number of questions set, but not the number of those to be answered and giving enough questions in Mineralogy and Petrology to enable a student thoroughly versed in those subjects to pass although he has only an elementary knowledge of Stratigraphy and Palæontology. The best plan would be to have a new Division (C) of Branch II of the B A. Examination to be entitled Physiography and Physical Geology. It would comprise Dynamical Geology, Mineralogy and Petrology. The student could then either take this Examination (of which I have prepared a Draft Syllabus) or the present examination which forms part of Branch III.

III. Inspection and Supervision of Mines.

This will take place under the superintendence of the Senior Geologist. The actual inspection will take place at such times as may be convenient, but mainly during the rainy season when survey work is impracticable. The Senior Geologist will be assisted by two Assistant Officers of the Department who are experienced in surveying, and also when desirable by the Prospectors. Arrangements must be made for the Surveying Assistants to have previous practice in Mine Surveying.

Plans will be furnished by the Companies which will be verified by the Officers of the Survey who will also take samples of the material excavated for crushing and of such other rocks and minerals as is desirable.

Arrangements will if possible be made with the Mine Owners for the plans to be drawn out on a uniform scale to be fixed hereafter. In any case copies of the plans of all mines will be drawn on the same scale by the Surveying Assistants of the Department and will be stored in the offices of the Department under the charge of one of its Officers in such a manner as to be easily accessible. The samples so obtained will be assayed in the Laboratory and the results carefully recorded. Such specimens as are suited for the purpose will be preserved in the Museum of the Department.

All future leases to be granted should be framed so as to facilitate the work of the Department in these matters. The leases should also contain provisions assuring to the Mysore Government the right of determining the manner in which the mines should be worked with regard to the safety and health of the employès. Perhaps however it may be considered preferable to deal with the latter subject by means of Legislation.

IV. The collection in a Geological Museum of objects of Geological, Mineralogical, Metallurgical and Mining interest, and the formation of a Geological Library.

With regard to this subject I cannot do better than refer to the extract from a letter by Mr. R. Bruce Foote which forms Appendix I to the "Proposed constitution of the Geological Survey of Mysore." To this I have little to add except that arrangements should be made for the formation from time to time of small selections of typical minerals and rocks, carefully named both in the English and the Vernacular which should be accessible to the public in the principal towns of the Province.

With regard to the Library, I must express my deliberate opinion that the provision of a complete Reference Library dealing with all subjects connected with the work of this Department is of the utmost importance for securing the efficiency and the scientific character of its work, and enabling it to keep abreast of the times.

A typical series of simple Text Books should also accompany each of the small Geological collections described above.

The Library and Museum should be entrusted to a Special Officer of the Department acquainted with French and German.

V. Maintenance of Laboratories for purposes of making Assays and Analysis of minerals and otherwise examining and investigating their properties.

It is important that these Laboratories should be equipped with all the most modern appliances. The whole will be under the immediate charge of the Senior Geologist and Analyst who will be assisted by the two apprentices chosen for their chemical knowledge and also by such other members of the Department as are available.

It is suggested that so far as the work of the Department permits, the Laboratory should be ready to conduct Assays and Analysis and examination of minerals and rocks for the general public at such rates as may be from time to time laid down, and that reports of the results should be made upon the authority of the Department.

At present the Laboratory at Head-quarters will only be open during such times as the other duties of the Senior Geologist and his Assistants permit. It may often be desirable to conduct Assays with portable furnaces in the field. At a future date the Laboratory at Head-quarters should be placed in charge of a Special Officer so that its work may be carried on without intermission.

If instruction in Assaying and Quantitative Analysis is available in India, the Apprentices selected for that work should undergo a course of six months duration at least in those subjects at any institution that is able to give the required instruction.* This will be a very convenient course to take as it must be at least that time before the Laboratory can be built and organized. If no such instruction can be obtained elsewhere, it must take place under the Senior Geologist when the Laboratory is available for the purpose. The work in the meantime will be confined to gold assay and other analysis which the facilities available permit. They will be carried out by the Senior Geologist and Analyst personally. Accommodation will be required by the Department for the following purposes:—

1. Museum.
2. Library.
3. Mapping room.
4. Accommodation for Map, Library and other records.
5. Chemical Laboratory.
6. Metallurgical Laboratory.
7. Geological Laboratory.
8. Lecture Hall.
9. Business Offices.
10. Rooms for Officers.

* I believe the Government Analyst at Madras could arrange for this.

Staff required.

(*a*) Director.
(*b*) Senior Geologist.
(*c*) Two Prospectors (engaged from year to year).
(*d*) 4 or more Surveying Assistants.
(*e*) 2 or more Chemical Assistants.
(*f*) 1 Curator of Museum and Librarian and Keeper of Records.
(*g*) 1 Head Clerk to conduct correspondence at Head-quarters.
(*h*) 2 Assistant Clerks to accompany the surveying parties.
(*i*) 2 Hammer-men.
(*j*) 4 Coolies to carry specimens, &c.
(*k*) 2 Coolies to assist in Laboratory, Library and Museum.
(*l*) 2 Miners (native) } To assist in prospecting and other work. They will only be
(*m*) 2 Carpenters } engaged when necessary.
(*n*) 1 Man to grind and mount rock specimens (professional polisher preferred).
(*o*) 7 Peons.

It may be suggested that each person in the service of the Department should give an undertaking (subject to a penalty) not to disclose any of the facts coming to his notice in the course of his work and pay over as the State may direct any profit he may have made by the improper use of his knowledge of such facts.

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iii. Mr. Bruce Foot's Memorandum, dated 8th November 1894.

The duties to be undertaken by this Department are five fold.

1. The execution of a complete Geological Survey of the State, on the latest Scientific principles, together with the publication of the results in the form of reports and maps, and of a manual of the Geological Structure of the country generally, when the general survey shall have advanced sufficiently.

2. The formation of a Museum of objects of Geological, Mineralogical, Metallurgical and Mining interest.

3. The training of a staff of Geologists and Mining Engineers fully qualified to be employed as such by the State.

4. The supervision of mines and important quarries throughout the State as to their entire working together with the registration and custody of certified maps and plans and other documents relating to the mines, also the supervision of all leases to be granted to future mines.

5. The working of Chemical, Metallurgical and Petrological Laboratories, and the assaying of ores, whether collected by the Officers of the Department or submitted for examination by other people, on payment of fees according to a settled scale.

For the carrying out of the duties above enumerated, the following Staff is deemed requisite :—

a. Director.
b. Senior Geologist and Analyst.
c. Minnig Assistant and Prospector.
d. Assistant Prospector.
e. Curator of the Museum, Librarian and Keeper of the Mining Records.
f. 4 or more Geological and Surveying Assistants.
g. 2 or more Chemical and Assaying Assistants.

Office Subordinates.

1 Head Clerk to remain at office and conduct circulation of correspondence and keep the office accounts.
1 Writer to assist the Head Clerk.
1 Section Cutter for Petrological work.
2 Peons to remain at office.
1 Sweeper.
1 Laboratory Servant.

Field Subordinates.

2 Hospital Assistants, one for each party.
2 Writers, one for each party.
10 Peons—
4 for Directors office.
3 „ Senior Geologist.
2 „ Mining Assistant.
1 „ Assistant Prospector.
8 Khalasis.
Four for each party.

Memo:

In Govt Pro: No.

36 D.H.O. of 26th
Jan 1.90

November 1894, the travelling allowance of Mr. Bruce Foote has been fixed by the terms of his engagement as follows: —

(1) Rs. 60 per diem for himself and

(2) For Railway journeys, one first class fare for himself, third class fare for Four Servants and the fare of two horses.

2. In his Batta Bill for January & February 1895: Mr. Bruce Foote charged daily batta at the above rate for his trip to

Irvine to back on
the 31st January &
to 5th February 1915,
under the provisions
of article 526 of the
Irvine Service Regu-
-lations which autho-
-rizes an Officer
travelling by railway
to draw either Railway
fare or daily batta.

As his Brave
Fortes travelling allow-
-ance has been fixed
by the terms of his
engagement he was
told, as advised by the Comptroller
that the rules
relating to batta contained
in the Irvine Service
Regulations do not
apply to his case.

Adverting to this he
states that he does
not quite understand
why the rules ~~relating~~
to his question do
not apply to his case,
as it is implied in
~~India~~ article 2,
of the said Regulations

that the rules contained therein apply to all officers holding substantive appointments under the Govt without any exception - He adds that the terms of his engagement refer only to the rates of travelling allowance & batta which he has to get but that they do not preclude him from availing himself of the benefit of the general provisions of the said Insane Service Regulations, which are applicable to all officers.

By claiming daily batta for his railway trip to Ismane & back under the provisions of article 52 of the Insane Service Regulations, Mr Bruce Foote wants to get ½ 2 ~~4~~ ½ more than what

with
be ~~worked~~ per
~~if he changed not~~
~~the rates fixed in~~
under
the above mentioned
Prov: —

Submitted for orders

J.O.
8/3/95

Same to bill under the terms
of the ~~Special~~ Agreement entered into
by Mr. Bruce North

Let me know what we up to
has done in the former bill
Yours &c pro Heim
15.3.95

Answered 17.3.95

Refer to
report of Engineer in charge (Ref)
Accept 5-7-95

Supt Audit
PMR
4/6/95

Note

Batta Bill of Mr R. Bruce Foote, State Geologist for the month of May 1895, amts: to Rs 208/8/- received with this letter No 2366/16 June 95.

With the exception of the items noted below all the other items entered in the Bill are in accordance with the rate fixed for him & may be passed.

date

(1) 1st — Yellahanka to Bangalore — Daily allce Rs 10 — "

(2) 7th Bangalore to Bomasandra & on to Kibbanhalli — do — " 10 — "

(3) 24th Chikmagalurhalli to Bomasandra & on to Bangalore — do — " 10 — "

(4) Charges for taking a Tonga from Bangalore to Bomasandra & back by rail on the 7th & 25th — " 18 — 8

(1) This appears to be a railway journey for which he is only entitled

to single first class fare for himself and single 3rd class fare for four servants, which amount in all to Rs 1—4—0. If approved the item will be altered accordingly.

(1) He is entitled to both Ry fare (1st class by rail) & Rs. 10/- daily allowance as fixed by terms of his engagement while in [illegible] the daily allowance.

(2) & (3) These trips appear to have been made partly by railway & partly by road - Under the Service Regulations Officers travelling in that manner are entitled to draw railway fare for journeys made by railway and mileage for road marches in continuation of railway journey, provided they travel more than 3 miles by road. To correct the items according the rules of the Service Regulations are not applicable to him, his travelling allowance having been fixed by

(2 & (3) He [illegible] charged daily [illegible] for his journeys & a special [illegible] allowance [illegible] fixed by -

Govt under the special engage-
ments entered into by him.
It is therefore submitted
that in both the journey
the daily allowance claimed
in each case may be
allowed to stand.

(4) This is only allow-
able to Officers, whose
travelling allowances
are governed by the
Service Regulations.
The item has therefore
to be disallowed.

Submitted for orders.

All the previous
Batta Bills of Mr Bruce Forte
~~have~~ were checked and
passed under the terms
of the engagement entered
into by Mr Bruce Forte
under 3 Cr Commissioners
orders.

Sd
17/6/95

(4) He is only entitled
to pay for 2 horses
& the amount paid for
his syce is therefore
inadmissible. This is
the only item that C.C.
for orders.

B.S.

Submitted to the Darsan

Such a rule made by the Councillor, each matter goes for examination to the member-in-charge of the Dept work it belongs. This bill is therefore submitted to the Darsan order.

2. Unless countermanded, I shall cause it to be submitted to the Darsan in due course by this Dept

Sd/-

12.6.95

I said before I don't want such things to be sent to me. Secy. is responsible to bring to notice any irregularity

Sd/-

22/6/95

Returned Bills.

Please see the orders on the subject.

Sd/-

Mr. B. Foote drew me to-day in the Office, and complained of the retrenchments made in the Batta bills sent by him for Nov. 1894 and March 1895, lately filed. The reductions were made under the orders of the 3rd Councillor, as per file herewith submitted.

2. The right deciding the matter depends on the construction of the sentence on page 3 of Govt Order No 36 of 26.11.94. in viz. the terms of Mr. D.T.O. Foote's engagement were described. He is to be allowed to draw "Rs 10 per diem for himself" and "For Railway journeys, one first

Yes. The bills may be passed as submitted.

24/6/95

OFFICE OF THE
16293
20. MAY 1895
DEWAN OF MYSORE
960

Gen. Serial No. 30.]

1895

Sta B-94

From

E. R. SUBROYER, Esq.,
Comptroller to Mysore Govt.

To

Under
The ~~Chief~~ Secretary to the
~~Government~~ *~~Dewan~~ of Mysore.*

Dated 28th
Despatched 28 May 95
Received

Enclosures No. 1

General No. 6827
No.

In reply to

SUBJECT.

Enclosing the Battle bill of Mr. Bruce Foote. State Geologist for reference and return.

G. R. S. 29/5/95

References—(to be entered only in the Dewan's Office).

No.

OFFICE OF THE COMPTROLLER OF MYSORE,

Bangalore, 28th May 1895

Urgent

COMPTROLLER'S OFFICE
28 MAY 95
MYSORE

From

E. R. SUBROYER, Esq., B.A., B.C.E.,
Comptroller to Mysore Government.

To

Under Government
The ~~Chief~~ Secretary to the ~~Dewan~~ of Mysore.

SIR,

I have the honor to enclose for reference and obliging return the batta bill of Mr. Bruce Foote, Mysore State Geologist for November 1894, as requested in your memo dated 27th Instant and to state that this is only batta bill of Mr. Bruce's received and passed prior to January 1895

I have the honor to be

Sir

Your most obedient Servant

My Eagles

for Comptroller

KD

Mysore Geological Department

Bangalore, 6th June 1895

No. 236

Encl 1

From S+R 40 Z 94 - 2

R. Bruce Foote Esqre F.G.S.

State Geologist

To

The Chief Secretary to the

Government of Mysore

Sir,

I have the honour to forward herewith my batta bill for May 1895 and to request that it may be kindly Countersigned and forwarded to the Comptroller at a very Early date

I have the honour further to invite your Attention to my letter No. 210 of the 4th ultimo

and to request that the bills forwarded therewith may also be Countersigned and forward -ed to the Comptroller.

I have the honour to be,
Sir,
Your most Obedient Servant

R. Bruce Foote
State Geologist

Read.

Passed bal a bill of
Mr R. Bruce Foote, State Geologist
for the month of November 1894
amounting to Rs. 40/- received
from the Comptroller with
his letter No. 6827 dy 28th
May 1895.

Order thereon No.

The above bill which
was passed inadvertently
for Rs 40/- is now corrected
in this office to Rs 27-14-0
in accordance with the
terms of the engagement
entered into by Mr Bruce
Foote and returned
to the Comptroller with
the remark that the
excess drawn by Mr
Bruce Foote, viz Rs 12-2-0,
will be recovered from him
in the usual course

10-6-95

D.S.O.

10/6/95

Secretary

To The State Geologist on proper
The Comptroller with
corrected bill for Nov 94
for Rs 27-4-0.
11/6/95

S.A. 6-94

No 22691-2 dy 10-6-95
p 5883 12

Done

Sd A 6-11-96

Read the following:

1 The Batta bill of the State Geologist for Nov. 1894. finally audited by the Comptr for Rs 27-14-0

2 Do. Do. for March 1895 finally audited Rs 46-3

3 Do. for April 1895 passed by the Comptr for Rs 1-4-0

4 Letter No 236 of 6 June 1895 fr. the State Geologist forwarding his Batta bill for May 1895.

No 24549 W / 6236 dt 26-6-95

Order.

Reimbursements were ordered to be made in the Travelling allowance bills for Nov. 1894 & Apr. 1895 of the State Geologist without due reference to the provisions of Govt order No 36-D.H.O dt 26-6-90 of Nov 1894; & in the terms of W. Bruce Foster's engagement are defined. Foster - he is thereby entitled to a daily rate of 20 Rs when out on duty, he and this should have been passed to him.

2. The reimbursements ordered to be made in their bills by Govt. order

as per margin are hereby cancelled, and the Comptroller is requested to pass the above bills fully, as below:-

Nov. 1894 ...	Rs 40-0-0	
March	" 46-3	
April 1895	10-	
May "	208-8	

Mr. B. Forte is authorized to accept Railway warrants for Expenses when travelling on duty, under the Govt. Order No 104-38-97 25.9.94:-

Sd/-

Sd/- 25.6.95

To, The State Geologist.

The Comptroller.

No 22691-2
£5883 dt 10.6.95

" 22693-4 dt Do.
£5884